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1. **PART I**

| **1. Personal Background** |
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| Below is a table in which you must complete the requested information. |

| Student name | **Eduardo Cardenas**  **Jordan Piña**  **Ignacio Ralph**  **Marcos Mayorga** |
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| Ruth | **21.139.064-6 / Ignacio Ralph**  **22.447.836-4 / Marcos Mayorga**  **20.986.233-6 / Jordan Piña**  **20.964.365-0 / Eduardo Cardenas** |
| Career | **Computer Engineering** |
| Headquarters | **Padre Alonso Ovalle** |

| **2. APT Project Description** |
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| In the description you should briefly indicate the name of your APT project and the competencies of the graduate profile that you are going to put into practice. If the areas of performance are defined in your degree, also mention which areas of performance the project is linked to. |

| Project name | *ASODI management system* |
| --- | --- |
| Area(s) of performance(s) | *Agile Project Management - Web Application Development - Mobile Application Development* |
| Competencies | * *Build programs and routines of varying complexity to provide solutions to organizational requirements, in accordance with market technologies and using good coding practices.* * *Implement comprehensive systemic solutions to automate and optimize business processes according to the needs of the organization.* * *Build data models to support the organization's requirements according to a defined and scalable design over time.* * *Manage IT projects, offering alternatives for decision-making according to the organization's requirements.* |

| **3. APT Project Foundation** |
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| Below are various fields that you must complete with the requested information. This section seeks to describe your project in detail and justify its relevance and pertinence. |

| Relevance of the APT project | *Every project, whether it is an innovation, product, service, etc., aims to respond to a situation or problem. Indicate what problem your project seeks to solve and its relevance to your career field. Also mention the context in which this problem is situated (location, who it would impact, etc.). It is important that this problem is relevant in the context of the profession, with its resolution being a real or simulated contribution to the organization or environment in which it is situated. Some questions that can help you answer this section are:*   * *Why did you choose this topic? Why is this topic relevant to your career field?* * *Where is the situation you are going to address located? (e.g. country, region, commune or institution) What are the main characteristics of that place?* * *Who is affected or impacted by the situation you are addressing? (e.g. age group, users of a service, etc.)* * *What would be the value contribution (real or simulated) of your APT Project for the work and/or social context in which it would be located?*   *The company ASODI (Association of Dialysis Patients and Transplant Patients of Chile) tells us that it is having problems with the management of patients from its agreements with other hospitals, since when the patient is referred to the institution, certain deadlines must be met, such as a time limit to give a response on whether or not to accept the patient, and if the response is positive, they must carry out the treatment within a certain period of time. These deadlines vary according to the association from which the patient comes.*  *Among these problems, the quality of information that ASODI receives stands out. This is due to patients who do not keep a record of their medical operations, incorrect contact information, or even incorrect relevant personal information such as the RUN. This leads to loss of time when contacting the client.*  *In addition to possible misinformation, there are problems when contacting clients to inform them of their appointment. Although the phone calls and emails that ASODI sends to its patients do not present problems as such, it is necessary to keep a record of these contact attempts in case of;*   * *The patient arrives for care outside the date and time established by ASODI* * *Serve as a response for hospitals that refer their patients through agreements regarding ASODI's contact attempts, in case the patient reports that he or she will not attend or does not show up at all.*   *Currently, the process is carried out manually and the patient data or records are in physical documents. The latter creates a problem when determining which patient is close to reaching the time limit for their treatment, not to mention the human errors that may occur during the process.*  *In this regard, the client has requested a dashboard where patients who are reaching their deadline stipulated by the agreement corresponding to said patient can be viewed (different agreements may have different deadlines).*  *At the client's request, the system must be able to detect waiting patients who are approaching their deadline and:*   * *Automatically send an email to the person in charge of managing said agreement about the patient* * *If the person has the Mi ASODI mobile application, an automatic notification will be sent to the registered patient's mobile phone informing them of the date on which they must appear.*   *The value contribution that this project provides to ASODI would be the ability to efficiently manage its patients from agreements (which are the vast majority) generating that ASODI can:*   * *Comply with the deadlines established in the contracts of the agreements, avoiding penalties and fines by hospitals or Fonasa.* * *Streamline the time of all staff related to the patient intake process with agreements (secretaries and doctors).* * *Opt for new agreements without the risk of not being able to meet the deadlines of other agreements.* |
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| APT Project Description | *The proposed solution is the development of a desktop application or a web solution that allows them to enter patients who require treatment. This platform must allow them to filter by the dates closest to completion, the agreement from which it comes and must also notify when there are 4 days left for the patient's treatment deadline, finally it must indicate the patient's status (pending, in process, discharged).# TO BE DEFINED* |
| Relevance of the project to the graduate profile | *Justify how your APT Project relates to the graduate profile of your degree and, in particular, to the competencies of the graduate profile that you selected previously.*  *How does the APT Project relate to your graduate profile? How are the skills you selected necessary to solve the problem you are working on?*  *Our APT project is directly related to our graduate profile, since we will be designing, developing, implementing and deploying an IT solution for a real client (ASODI), through collaborative work between a work team.*  *Furthermore, as a group we are actively applying a framework (in this case SCRUM) in which we actively focus on capturing the needs of our client, generating versions of a system that is constantly reviewed and approved by the client.*  *The chosen skills are relevant to solving the problem, since they are key tasks to be carried out when carrying out an IT project which seeks, in itself, to satisfy the needs of an organization.*   * *Build programs and routines of varying complexity to provide solutions to organizational requirements, in accordance with market technologies and using good coding practices.* * *Implement comprehensive systemic solutions to automate and optimize business processes according to the needs of the organization.* * *Build data models to support the organization's requirements according to a defined and scalable design over time.* * *Manage IT projects, offering alternatives for decision-making according to the organization's requirements.* * *Offer IT solution proposals by comprehensively analyzing processes according to the organization's requirements.* |
| Relationship with professional interests | *Please indicate how the APT Project you propose relates to your professional interests.*  *What are your professional interests? What aspects of your professional interests are reflected in your APT Project? How will doing this APT Project contribute to your professional development?*  **Ignacio Ralph**  Professional interests:  What aspects of your professional interests are reflected in your APT Project?  How will it contribute to your professional development?  **Eduardo Cardenas**  Professional interests:  What aspects of your professional interests are reflected in your APT Project?  How will it contribute to your professional development?  **Jordan Piña**  Professional interests:  What aspects of your professional interests are reflected in your APT Project?  How will it contribute to your professional development?  **Marcos Mayorga**  Professional interests:   * Web development, both frontend and backend * Cybersecurity * Database management   What aspects of your professional interests are reflected in your APT Project?   * In the APT project, the management of the database is mainly reflected because it is necessary to create a   How will it contribute to your professional development?   * It will allow me to reinforce my knowledge such as learning how to implement a database |
| Feasibility of APT Project Development | *Briefly justify why it is possible to develop your APT project. Consider the time and materials you need to develop it, as well as the possible external factors that could hinder and facilitate its development.*  *Why do you think it is possible to develop your APT Project? To answer this question you must take into consideration:*   1. *Duration of the semester* 2. *Hours assigned to the subject* 3. *Required materials* 4. *External factors that facilitate its development* 5. *External factors that hinder your development and ways in which you could solve them* |

1. **PART II**

| **4. Objectives** |
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| In this section you must define the general and specific objectives of the APT Project. It is important to clarify that the objectives must be stated clearly, concisely and without giving further explanations, that is, they must be understood by themselves. It is suggested to write them using a verb in the infinitive, since this requires specifying specific actions. |

| General objective | *Describe the general objective(s) of your work. These represent the main goals of the project you will undertake, so that they will serve as a guide so that, once the entire process is finished, you can compare the result with what was planned and thus see to what extent it was possible to achieve it.*  *Develop an IT solution for the company ASODI which will streamline the process of managing patients from the different associations that have an agreement with the company.* |
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| Specific objectives | *Describes the specific objectives of the project. These allow the work to be grounded and specific procedures to be followed to be outlined. They are derived from the general objective.*   * Optimize the entry of information from agreements, migrating from the current format to a web platform with key data validators (Rut, phone, email) * Generate backup information corresponding to the contacts that ASODI makes with its patients. * Facilitate information   *The solution to be developed must consider the following main aspects:*   * *Intuitive use* * *Enter patients using a form* * *Have a filtering system* * *Notifications to indicate patients who are about to reach their treatment deadline* |

| **5. Methodology** |
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| In the following section you must describe the methodology, specific to your discipline, that you will use to solve the APT project described above, including the stages and work methods. |

| Description of the Methodology |
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| *Describe how you will address the problem or situation identified above, outlining the methodology that will be used to meet your objective.*  *When the project to be developed is a group project, it is necessary to incorporate the definition of the functions, tasks and responsibilities associated with each member of the team.*  *The project will be developed by a work team composed of 4 members who will be divided into the following functions:*   * *Scrum Master: Ignacio Ralph* * *Product Owner: Marcos Mayorga* * *Development team: Jordan Piña and Eduardo Cardenas*   *The team proposes using the SCRUM framework, conducting weekly sprints. The project has a duration of 3 to 4 months to be executed, for which the following distribution is determined:*  *1.- During the first 4 weeks, meetings will be held with the client in order to understand their needs and determine what the system should contain. During these meetings, mockups of what the final product would look like will be shown to the client so that they can correct any functionality as required.*  *2.- The next 10 weeks will focus on system development. For this, certain data and documents will be requested from ASODI in order to initially create the database. After this, a form will be generated to allow patient data to be entered (some of the fields are: full name, RUT, contact number, email, agreement, etc.), the development of a view that allows all registered patients to be viewed along with their respective filtering system, and a notification system for the company's administrative staff, which will notify that a patient is about to reach the deadline for their treatment.*  *3.- The following weeks are for completing the missing product documentation and the final meetings with the client, the latter in order to deliver the product.*  *It is worth noting that it is proposed to hold a meeting with the client at the end of each Sprint in order to deliver the MVP and its respective increments.* |

| **6. Evidence** |
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| Next, describe what evidence will be assessed in the progress report and final report of your APT project. These evidences must be agreed upon with your teacher.Evidence is understood to be the products developed during the project and whose purpose is to make visible or document how the work has been implemented. |

| **Type of evidence**  **(advance or end)** | **Name of the evidence** | **Description** | **Justification** |
| --- | --- | --- | --- |
|  |  | *Describe the evidence agreed upon with your teacher, always keeping in mind that these must account for the development of your APT Project.* |  |
| *Advance* | *The product vision* | *The product to be delivered is defined, making it clear who it is aimed at, the problem it seeks to solve, the description and benefits of the product, why a better alternative than the competition is better.* | *This document allows us to determine in a more complete way the objective and purpose of the project to be developed.* |
| *Advance* | *It is - It is not - What it does - What it does not do* | *Allows you to determine the scope of the project and maintain the project objective* | *Prevent the team from implementing features that do not correspond to the final product* |
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| **7. Work Plan** |
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| In the following table, define the planning of your APT Project according to what is required. |

| **APT Project Work Plan** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Competency or units of competencies | Name of Activities/Tasks | Description Activities/Tasks | Resources | Duration of the activity | Responsible[[1]](#footnote-0) | Observations |
| *Name the competencies or units of competencies that are related to the different activities required for the development of the activity.* | *Indicate the name of the task or activity.* | *Describe the task or activity.* | *Name the resources needed to carry out the defined activities.* | *Write the duration of activities or tasks.* | *Enter the name of the team member responsible for the activity and associated tasks.* | *Write the difficulties or facilitators that could arise during the execution of each of the activities proposed to carry out the work plan.* |
| *- Build data models to support the organization's requirements according to a defined and scalable design over time.*  *-Program queries or routines to manipulate information from a database according to the organization's requirements.* | *Database modeling* | *The database will be created to store the data of each patient, agreement, doctor in charge, etc.* | *Know the data that the company works with in order to know the corresponding type of data* | *1 week* | *Eduardo Cardenas Jordan Pineapple* | *Difficulty: Wait for ASODI to send the fields that require* |
| *-Implement comprehensive systemic solutions to automate and optimize business processes according to the needs of the organization.*  *-Develop a software solution using techniques that allow systematizing the development and maintenance process, ensuring the achievement of objectives.* | *Creating a form to enter the patient* | *Form to enter new patients from agreements into the system.* | *Having the database created* | *2 days* | *Eduardo Cardenas*  *Jordan Pineapple* | *Facilitator: There is information about the data that ASODI requires to enter a user* |
| *-Implement comprehensive systemic solutions to automate and optimize business processes according to the needs of the organization.*  *-Develop a software solution using techniques that allow systematizing the development and maintenance process, ensuring the achievement of objectives.* | *Create view of admitted patients* | *Patients registered in the system will be displayed, along with some relevant data such as the date of admission, estimated date of discharge, patient status, etc.* | *Patient successfully entered into the database* | *2 week* | *Eduardo Cardenas*  *Jordan Pineapple* |  |
| *-Implement comprehensive systemic solutions to automate and optimize business processes according to the needs of the organization.*  *-Develop a software solution using techniques that allow systematizing the development and maintenance process, ensuring the achievement of objectives.* | *Create filters for display* | *Patients can be filtered by admission date, discharge date, status, etc.* | *Patient successfully entered into the database* | *4 days* | *Eduardo Cardenas*  *Jordan Pineapple* |  |
| *-Implement comprehensive systemic solutions to automate and optimize business processes according to the needs of the organization.*  *-Develop a software solution using techniques that allow systematizing the development and maintenance process, ensuring the achievement of objectives.* | *Implement notification system* | *Administrative staff will be notified that x patient is close to reaching the deadline for treatment.* | *Patient successfully entered into the database* | *4 days* | *Eduardo Cardenas*  *Jordan Pineapple* |  |
| *-Implement comprehensive systemic solutions to automate and optimize business processes according to the needs of the organization.*  *-Develop a software solution using techniques that allow systematizing the development and maintenance process, ensuring the achievement of objectives.* | *Creating a super user* | *He will be the only one who can change any patient data if necessary, in addition to being the only one who can grant permissions to other users of the system.* | *There must be patients admitted* | *2 days* | *Eduardo Cardenas*  *Jordan Pineapple* |  |

| **8. Gantt chart** |
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| Find a Gantt Chart format that suits you and organize the activities planned in the previous point in it, considering the period assigned for the development of your APT Project. You must maintain the temporality of the academic period in the development of the three phases contemplated by the Degree Portfolio Subject. |

| **Activity** | **Phase 1** | | | | **Phase 2** | | | | | | | | | | | | **Phase 3** | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **S 1** | **S 2** | **S 3** | **S 4** | **S 5** | **S 6** | **S 7** | **S 8** | **S 9** | **S 10** | **S 11** | **S 12** | **S 13** | **S 14** | **S 15** | **S 16** | | **S 17** | **S 18** |
| *Describe activities from the previous point* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
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1. If the APT Project is a group project, the names of those responsible for each task or activity must be indicated in this column. This will later allow for differentiating the evaluation for each member. [↑](#footnote-ref-0)